

## University of Wollongong Research Online

---

University of Wollongong in Dubai - Papers

University of Wollongong in Dubai

---

1-1-2012

### Adding bricks to clicks: when do offline channel attributes influence consumers' intentions to shop online?

Yuanfeng Cai  
*Xiamen University*, [bonniecyf@yahoo.com.cn](mailto:bonniecyf@yahoo.com.cn)

Kathy Ning Shen  
*University of Wollongong in Dubai*, [kathys@uow.edu.au](mailto:kathys@uow.edu.au)

Zhaoyang Guo  
*Xiamen University*

Follow this and additional works at: <https://ro.uow.edu.au/dubaipapers>

---

#### Recommended Citation

Cai, Yuanfeng; Shen, Kathy Ning; and Guo, Zhaoyang: Adding bricks to clicks: when do offline channel attributes influence consumers' intentions to shop online? 2012.  
<https://ro.uow.edu.au/dubaipapers/404>

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: [research-pubs@uow.edu.au](mailto:research-pubs@uow.edu.au)

Adding bricks to clicks: when do offline channel  
attributes influence consumers' intentions to shop online?

By

Yuanfeng Cai, School of Management, Xiamen University

Kathy Ning Shen, University of Wollongong in Dubai

Zhaoyang Guo, School of Management, Xiamen University

April 2012

Adding bricks to clicks: when do offline channel  
attributes influence consumers' intentions to shop online?

Abstract

Given the fierce competitive environment to date, there is an increasing trend of introducing new channel(s) to complement their existing one by retailers. A recent phenomenon is that purely online retailers are extending their offline outlets. How online consumers react to such channel extension? More specifically, does the offline channel visit only influence offline channel patronage? In addressing this question, in present study, we propose and empirically test a framework for explaining the relationships between offline channel attributes and online consumers' intentions to shop in both channels. The results reveal that while cognitive offline channel attributes have a direct and positive impact on online consumers' intentions to shop offline, relational offline channel attributes contribute to consumers' patronage intentions online, given the contextual intervention. Implications are further discussed.

Key words: multichannel, bricks-to-clicks, channel attributes, shopping intention

## 1. Introduction

There is a widespread of multiple channel integration in recent years (Sawhney, 2001). Researchers have found that multichannel shoppers are significantly more profitable than single-channel shoppers (Kumar and Venkatesan, 2005; Thomas and Sullivan, 2005). Accordingly, there is growing consensus that business model which relies on both bricks and clicks is essential for sustainability in today's competitive environment (Browne, Durrett and Wetherbe, 2004; Bustillo and Fowler, 2009).

Despite significant potential provides by multichannel retailing, marketing across channels could be challenging, as consumer behavior is more complicated in a multichannel context than in single channel context. For example, consumers may search and order products in one channel while making purchase and picking the products in another channel. Previous study indicates that the adding of one channel to another have significant impact on consumers' behavior (Ansari, Mela and Neslin, 2008; Avery, Steenburgh, Deighton and Caravella, 2011). Therefore, research is needed to understand how consumers make choices relative to more available retail alternatives.

The main objective of this study is to examine online consumers' reactions to the introduction of the physical outlet of an pre-existing online store. Specifically, we identify underlying offline channel attributes that drive online consumers' intentions to shop offline. In addition, we investigate how these offline channel attributes interact with consumers' characteristic (i.e., interaction orientation) to influence their intentions to shop in both channels. This study contributes to the

current multichannel literature in following ways. First, this study provides a fresh perspective to understand consumer behavior in a multichannel setting. Majority of prior research takes the perspective of introducing an online channel to pre-existing conventional store (e.g., Ansari et al., 2008; Biyalogorsky and Naik 2003; Browne et al., 2004). This study takes the perspective of introducing an physical channel to pre-existing online store. It is imperative to study the effects of introducing bricks to clicks today, as many well-known purely online retailers such as Amazon, are expanding offline to complement their purely online operation. Moreover, adding the offline channel to an online store produces different effects than adding an online channel to offline store (Avery et al., 2011). However, relevant study remains unexplored (Avery et al., 2011). Second, the understanding of salient offline cognitive and affective attributes that motivate online consumers to patronize the offline channel provides important guidelines for retailers to effectively and efficiently design their extended physical outlet. The inclusion of relational attributes provides researcher a more comprehensive perspective to understand consumer needs and wants. Last but not least, the understanding of the interaction effect between consumer characteristic and store attributes is particularly important for multichannel retailers in identifying specific situational condition that affect consumers' behavior across channels.

The paper is organized as follows. We begin by proposing hypotheses based on a brief review on relevant literature. Then, we discuss the research method. After that, we present data analyses and results. We conclude with a discussion of

the findings and implications of this study as well as directions for future research.

## **2. Hypotheses Development**

Prior study suggests that consumers make channel choice decision based on the channel attributes. Particularly, research has demonstrated that both cognitive and affective attributes are relevant to understand consumers' channel choice (Bloemer and de Ruyter, 1997; Donovan, Rossiter, Marcoolyn and Nesdale, 1994; Grewal, Krishnan, Baker and Borin, 1998; Sherman, Mathur, and Smith 1997; Verhagen and van Dolen, 2009; Wikstrom, 2005). We propose that relational attributes serve as another important factor that influences consumers' channel choice behavior. In addition, we argue that consumer characteristics, such as the interaction orientation moderates the relationship between affective and relational attributes and consumers' shopping intentions. As illustrated in Figure 1, we develop a framework, which outlines the relationship between these constructs. In the following section, the relevant hypotheses will be discussed.

<Figure 1 here>

### *2.1 Offline channel attributes & online consumers' shopping intention*

Drawing on store image literature (Martineau, 1958), we define a cognitive attribute as a functional characteristic of a retail store that allows consumers to accomplish their shopping goals. Some examples of the cognitive attributes in this study include product assortment, pricing level, quality of the merchandise and cleanness of the shopping environment. Although cognitive attributes are available both online and

offline, they may be more salient in the offline channel than in the online channel, as the notion that consumers tend to gather product information online and purchase product offline has been widely accepted (Browne et al., 2004). A number of studies have found a positive relationship between cognitive attributes and consumers' patronage intentions (Baker, Levy, and Grewal, 1992; Dawson, Bloch and Ridgway, 1990; Grewal et al. 1998; Smith and Sherman 1993). Therefore, it is reasonable to expect that when an online retailer extends its channel to offline, the cognitive attributes of offline channel may be preferred by online consumers. Thus, we propose that:

**Hypothesis 1a.** There is a positive relationship between offline cognitive attributes and online consumers' intentions to shop offline.

Prior study suggests that affective attributes are characterized by the pleasantness of the shopping experience (Hopkins and Alford, 2001). Accordingly, we define an affective attribute as an experiential and /or emotional characteristic of a retail store that stimulates consumers to shop. This attribute corresponds to Paul, Hennig-Thuran, Gremler, Gwinner and Wiertz's (2009) conceptualization of psychological benefits that drive repeat purchase, which cover customer confidence, autonomy, privilege, comfort and welcomeness.

The important role that affective attributes play in influencing consumer behavior has been well established (e.g., Donovan et al., 1994; Sherman et al., 1997),

Although affective attributes available both online and offline, some affective attributes (e.g., sensory experience) are more difficult to access online than offline (Browne et al., 2004; Wikstrom, 2005). The unavailability of such type of affective benefits has resulted in negative emotional responses among online consumers (Verhoef and Langerak, 2001), which prevent them to shop online eventually (Mathwick et al., 2002; Wikstrom, 2005). Moreover, recent study with empirical evidence has shown that multichannel shoppers experience more shopping enjoyment than single channel shoppers (Konus, Verhoef and Neslin, 2008), thus we predict:

**Hypothesis 1b.** There is a positive relationship between offline affective attributes and online consumers' intentions to shop offline.

Relational communication has been widely used by firms as an important part of relationship marketing strategy to retain their customers (Godfrey et al., 2011), therefore, we argue that the role that relational attributes play in determining consumer behavior should not be ignored. We define a relational attribute as a communicated characteristic of a retail store that allows consumers to establish a personal relationship with salespersons. A positive link has been found between relational communication and customer profitability, share of wallet, and relationship duration (Reinartz, Thomas and Kumar, 2005; Rust and Verhoef, 2005; Verhoef, 2003). Researchers suggest that consumers' perception on a firm's endeavour in investing positive relationship with them will make them return "good for good",



which eventually reflected in their increase in spending (Bagozzi, 1995; Becker, 1990; Godfrey et al., 2011).

Given its technology-intensive nature, shopping online has been widely acknowledged as lacking of human contact (Brunelle, 2009). The physical channel of an online store provides complementary source for relational communication for online shoppers. Thus, we hypothesize that:

**Hypothesis 1c.** There is a positive relationship between offline relational attributes and online consumers' intentions to shop offline.

## *2.2. The Role of Interaction Orientation*

Interaction orientation is a type of consumer characteristics, which can significantly shapes consumers' shopping behavior (Homburg, Muller and Klarmann, 2011).

Homburg and colleagues define interaction orientation as “*a consumer's tendency to socialize with a salesperson in sales conversations*” (2011, p. 799). Williams and Spiro (1985) suggest that interaction-oriented consumers are interested in establishing strong personal relationships in social interactions. In contrary to conventional stores, online stores have been perceived as lacking of human contact (Brunelle, 2009). Given the intensive face-to-face contact, social interaction oriented consumers are found tend to shop in conventional stores as opposed to the online stores (Alba, John, Barton, Chris, Richard, Alan and Stacy, 1997; Dabholkar and Bagozzi, 2002; Rohm and Swaminathan, 2004). Therefore, we expect:

**Hypothesis 2.** There is a positive relationship between online consumers' interaction orientations and their intentions to shop in the physical channel of an online store.

### *2.3. The moderating effect of interaction orientation in offline channel*

According to the definition of interaction orientation (Homburg et al., 2011), consumers with a pronounced interaction orientation tend to establish personal relationship with salespersons during their shopping process. Therefore, the salesperson attempts at building a personal relationship with these consumers may be perceived favorably and help to form consumer trust, which in turn, leads to positive impact on their shopping behavior (Macintosh and Lockshin, 1997; Homburg et al., 2011). In contrast, consumers with low interaction orientation may perceive salesperson attempts at establishing a personal relationship as insincere, which may lead to negative reactions (Hennig-Thurau et al., Groth, Paul and Gremler, 2006). In fact, consumers' interaction orientation has been found to moderate the relationship between salesperson's relational customer orientation and customer loyalty (Homburg et al., 2011). Accordingly, given that the relational attributes are more accessible offline, therefore, we suggest:

**Hypothesis 3.** Interaction orientation moderates the relationship between offline channel relational attributes and online consumers' intentions to shop offline: offline channel relational attributes are more positively related to consumers' intentions to shop offline when consumers' interaction orientations are high.

Highly interaction oriented people have been found to avoid feelings of boredom and loneliness (Pan and Zinkhan, 2006). In other words, these people may be more experiential-driven than those with low interaction orientation (Fournier, Dobscha and Mick, 1998). Therefore, the affective attributes provided in a store are expected to arouse them and lead to positive emotional responses. In contrast, people with low interaction orientation will be less sensitive to these attributes. Given that affective attributes are important in attracting consumers in an offline channel than in online channel (Rohm and Swaminathan, 2004), we suggest:

**Hypothesis 4.** Interaction orientation moderates the relationship between offline channel affective attributes and online consumers' intentions to shop offline: offline channel affective attributes are more positively related to consumers' intentions to shop offline when consumers' interaction orientations are high.

#### *2.4. The moderating effect of interaction orientation in online channel*

A number of researchers have found that there is a positive impact of perception about a retailer's offline channel to the retailer's extended online channel (Jin, Park and Kim, 2010; Kwon and Lennon, 2009; Montoya-Weiss, Voss and Grewal, 2003; Yang, Lu, Zhao and Gupta, 2011). For instance, Jin et al., (2010) propose that firm reputation and consumer offline satisfaction positively predict consumers' satisfaction online. Yang and colleagues (2011) claim that perceived offline service quality positively affect perceived online service quality. Although these studies are not directly

relevant to this study, in which offline channel is extended to existing online store, but the findings imply that consumers tend to transfer their favorable perception formed in one channel to another channel under the same firm (Yang et al., 2011). We hypothesized earlier that the interaction effect between highly interaction-oriented consumers and offline channel's relational and affective attribute can lead to online consumers' stronger intention to shop offline. Here we expect those highly interaction-oriented consumers' favorable perception formed offline will be transferred online, which in turn, have a positive effect on their intention to shop online. Accordingly, we propose:

**H5:** Interaction orientation moderates the relationship between offline channel relational attributes and online consumers' intentions to shop online: offline channel relational attributes are more positively related to consumers' intentions to shop online when consumers' interaction orientations are high.

**H6:** Interaction orientation moderates relationship between offline channel affective attributes and online consumers' intentions to shop online: offline channel affective attributes are more positively related to consumers' intentions to shop online when consumers' interaction orientations are high.

### **3. Method**

#### *3.1. Data Collection and Sample Characteristics*

A self-administered survey was conducted online to collect the data. A random sample of 441 potential respondents was drawn from a panel with online shopping experience within the past four weeks. The respondents were limited to online merchandise shopping context rather than service shopping context, because the operation can be digitalized for service retailing (such as travel and entertainment) where transactions can be completely electronically. Of 441 questionnaires returned, 335 were deemed usable, after the data editing and cleaning up processes. The characteristics of respondents are reported in Table 1. Overall, there are more female than male respondents. Majority of the respondents are relatively young (aged between 21 to 39) with high educational background (bachelor degree) and have middle level of monthly income. In general, the profile of the respondents are consistent to the ones that reported in previous studies, which represents general online shoppers (e.g., Rohm and Swaminathan, 2004). In addition, around a half of the respondents shop online at least once per week, suggesting they are regular shoppers who tend to be familiar with the online shopping environment. The main categories of products purchased by respondents include books, clothing and shoes, groceries, cosmetics and electronics, similar to the ones that reported to be bought frequently online (Browne et al., 2004).

<Tabel 1 here>

### *3.2. Measurement*

We adapted most of the scales used in this study from previous research. The summary statistics for all measures are reported in Table 2. With few exceptions,

item reliabilities are above the cutoff value of .70 (Hair, Anderson, Tatham and Black, 1998).

#### *3.3.1. Cognitive attributes.*

We adapted thirteen items from Paul and colleagues (2009) to measure cognitive attributes. These attributes have often been included in prior research (e.g., Golden, Gerald and Mary, 1987; Grewal et al., 1998; Verhagen and van Dolen, 2009). An example being “The store has a great assortment of offerings for sale.” Given the multi-dimensional nature of cognitive attribute (e.g., Eroglu, Machleit and Davis, 2001), a principal component factor analysis using varimax rotation was conducted to identify underlying dimensions. Four factors were extracted from the factor analysis results, with four, three, three, and three items loading cleanly on the first, second, third and fourth factor, respectively. All factor loadings are significantly higher than .05, explain 62.7 % of variance for the sample. The factors were then labelled as shopping environment, value for money, service and merchandise, respectively.

#### *3.3.2. Affective attributes.*

Five items adapted from Paul and colleagues (2009) were used to measure affective attributes. An example being “It helps me to feel less stress when there.”

#### *3.3.3. Relational attributes.*

Another five items that also adapted from Paul and colleagues (2009) were used to measure relational attributes. An example being “The employees/salespersons know you well and you are very familiar with they.”

#### *3.3.4. Interaction orientation.*

To measure a consumer’s interaction orientation, we adapted three items from McFarland, Challagalla and Shervani (2006) and Williams and Spiro (1985). One item was dropped due to low loading in the measurement model. An example being “In sales conversations, I like to establish a personal relationship with salespeople.”

#### *3.3.5. Intention to shop online/offline.*

Intention to shop online and offline were measured by two items, respectively. An example being “If this online store has extended physical outlet, I plan to patronize it” for intention to shop offline; “Even an extended physical outlet is available for this online store, I still plan to patronize the online store” for intention to shop online.

#### *3.3.6. Control variables.*

Given the well established link between attitude and behavioral intention (Keen et al., 2004), and the potential relationship between prior online experience (i.e., shopping frequency) and channel choice behavior, both attitude and shopping frequency online are included as control variables in statistical analyses.

---

<Table 2 here>

#### **4. Data analyses**

A Partial Least Square (PLS) analysis was first conducted to test the measurement model of all constructs. The results of the PLS analysis are presented in Table 3. The factor loadings of the latent variables are generally high (i.e., >.60). The fact that all t-tests are significant indicates that all items are measuring the construct they are associated with. Further, the values for composite reliability are acceptable (i.e., >.60) (Bagozzi and Yi 1988), indicating the convergent validity of the scales was established. Moreover, all constructs achieved acceptable levels of discriminant validity, where the squared correlations to other constructs are less than the construct's own extracted variance.

<Table 3 here>

A hierarchical regression analysis was then used to test the hypotheses. In order to reduce the collinearity between the predictors and their product terms, we centered all constructs on their grand mean (Aiken & West, 1991).

##### *4.1. Results*

###### *4.1.1. Offline Channel Attributes & Consumers' Shopping Intention Online*

Table 4 presents the results of the hierarchical regression analyses with online consumers' intentions to shop offline as dependent variable. Hypothesis 1a suggests that cognitive attributes have a positive effect on online consumers' intentions to shop offline. Results of the model 2 indicate that only two dimensions of cognitive



attributes positively affect online consumers' intentions to shop offline ( $\beta_{\text{cog1}} = .23$ ,  $p < .05$ ;  $\beta_{\text{cog4}} = .28$ ,  $p < .01$ ), accounting for 14 percent of the variance in online consumers' intentions to shop offline beyond that accounted for by control variables. Thus, Hypothesis 1a is partially supported. Contrary to Hypothesis 1b and 1c, no influence is found between the affective and relational attributes and online consumers' intentions to shop offline, respectively ( $\beta_{\text{aff}} = .08$ ,  $p > .05$ ;  $\beta_{\text{relat.}} = .02$ ,  $p > .05$ ), therefore, both Hypothesis 1b and 1c are not supported.

#### 4.1.2. *The Role of Interaction Orientation*

Hypothesis 2 proposes a positive relationship between online consumers' interaction orientations and their intentions to shop offline. As evident in Table 4, the results of the model 3 reveal a positive effect of interaction orientation on online consumers' intentions to shop offline, fully supporting Hypothesis 2 ( $\beta = .18$ ,  $p < .01$ ).

<Table 4 here>

With regard to the moderating influence of online consumers' interaction orientations on the relationship between offline attributes and online consumers' intentions to shop *offline*, an interaction does not exist between the relational attributes and interaction orientations ( $\beta = -.01$ ,  $p > .05$ ). In addition, the interaction between affective attributes and interaction orientations is also insignificant ( $\beta = .08$ ,  $p > .05$ ), suggesting both Hypothesis 3 and 4 are not supported.

With regard to the moderating influence of online consumers' interaction orientations on the relationship between offline channel attributes and online

consumers' intentions to shop *online*, the results presented in Table 5 indicate a significant interaction effect between offline relational attributes and interaction orientations ( $\beta = .11, p < .01$ ). A further simple slope analysis reveals that although offline relational attributes do not significantly predict consumers' intentions to shop online for consumers with high interaction orientations ( $\beta = .14, p > .05$ ), they significantly predict consumers' intentions to shop online for consumers with low interaction orientations in a negative way ( $\beta = -.11, p < .06$ ). As illustrated in figure 2, the slope is in the positive direction for both high and low interaction orientations, the influence of offline relational attributes is seemed to result in stronger intentions to shop online for consumers with high interaction orientations than those with low interaction orientations. Therefore, Hypothesis 5 is supported.

<Table 5 here>

<Figure 2 here>

Given that the results presented in Table 5 do not indicate a significant interaction effect ( $\beta = .08, p > .05$ ) between offline affective attributes and consumers' interaction orientations, Hypothesis 6 is not supported.

## 5. Discussion

### 5.1 Summary of findings and implications

Our study demonstrates the impact of introducing physical channel to pre-existing online store on online consumers' shopping intentions in both channels. Overall, the results suggest that online consumers' offline exposure significantly influence their

intentions to shop both online and offline. A number of findings drawn from this study should provide multichannel researchers and practitioners valuable insights in understanding the mechanism of such influence.

First, our findings suggest that online consumers are primarily motivated to visit the physical outlet of an online store due to the cognitive benefits the outlet provides. More specifically, the favorable shopping environment and products with high variety and quality offered are main reasons that drive online consumers to shop offline. However, offline channel is unlikely to induce online consumer as a venue for recreation and socializing. The finding is somewhat surprising, as prior studies continue to reveal that compared with online store, consumers are more likely to shop in the conventional store for hedonic reasons (e.g., Rohm and Swaminathan, 2004). A plausible explanation may be that consumers tend to shop with utilitarian purposes online (Rohm and Swaminathan, 2004; Overby and Lee, 2006), and they naturally transfer this purpose to the offline channel, which perceived as an integrated part of the online store. Given this motivation, the more hedonic-driven affective and relational attributes may be considered less important for them. Put together, these findings provide important guidelines for online retailers in designing their extended channel offline. Specifically, the physical outlet of an online store should NOT be designed in the same way in designing conventional store, which stresses the importance of both functional and experiential attributes. Rather, greater emphasis should be paid on the functional attributes of the outlet.

Next, the results of this study reveal that for consumers who are highly value

interactions with salespersons, physical channel serves as a more attractive venue than online channel to satisfy their needs. In order to better satisfy this segment, salespersons should be more relational-driven and may carefully tailor personalized message to communicate with these consumers.

The findings of this study also indicate an interaction effect between bricks and clicks shopping experience. Specifically, for consumers who are highly interaction-oriented, their relational experience with salespersons in the offline channel have a positive effect on their shopping intentions online. The favorable experience that consumers gain in offline channel is likely to produce a halo effect on their online store perception. However, the interaction effect is unlikely to influence consumers' intentions to shop offline, suggesting additional moderator should be explored.

Another unexpected findings regarding the relationship between offline affective attributes and consumers' intentions to shop in both channels is not moderated by their interaction orientation. A possible intervention may again rely on consumers' shopping purpose. For example, consumers shop with functional motives may perceive affective attributes less important than those who shop with recreational motives.

## *5.2. Limitations and future research*

One limitation of this study is that the majority of respondents recruited in this study do not have relevant shopping experience in a multichannel context, especially where

offline channel is added as an extension of existing online store. This makes the results reported in this study are based on a sample of consumers who are dominated by online shopping experience. The characteristics of the samples may change once more consumers begin to shop with multiple channels.

An interesting area for future research concerns additional factors that moderate the links between offline affective and relational attributes and online consumers' intention to shop offline. For example, consumers' level of shopping experience with multichannel may moderate the relationship between channel attributes and shopping intention. Future study may investigate how first time shoppers and repeat shoppers evaluate channel attributes differently. Researchers can also examine how consumers' evaluations differ upon the type of products they purchase and their goals of shopping. In addition, it would be interesting to examine when consumers use a channel as the primary shopping venue while use the other as a supplementary channel.

## References

- Aguinis H, Beaty JC, Boik RJ, Pierce CA. Effect size and power in assessing moderating effects of categorical variables using multiple regression: A 30-year review. *J Appl Psychol* 2005; 90: 94-107.
- Aiken LS, West SG. Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage:1991.
- Alba J, John L, Barton W, Chris J, Richard L, Alan S, Stacy W. Interactive home shopping: consumer, retailer, and manufacturer incentives to participate in electronic marketplace. *J Mark* 1997; 61(3):38-53.
- Ansari A, Mela CF, Neslin SA. Customer Channel Migration. *J mark* 2008; XLV: 60-76 [February].
- Avery J, Steenburgh TJ, Deighton J, Caravella M. Adding bricks to clicks: predicting the patterns of cross-channel elasticities over time. Working paper. 2011.
- Bagozzi RP. Reflections on Relationship Marketing in Consumer Markets. *J Acad Mark Sci* 1995; 23 (4): 272–77.
- Bagozzi RP, Yi Y. On the Evaluation of Structural Equation Models. *J Acad Mark Sci* 1988; 16: 74-94[Spring].
- Baker J, Levy M, Grewal D. An experimental approach to making retail store environmental decisions. *J Retail* 1992; 68 (4): 445–460.

- 
- Becker LC. Reciprocity. Chicago: University of Chicago Press:1990
- Biyalogorsky E, Naik P. Clicks and Mortar: The Effect of Online Activities on Offline Sales. *Mark Lett* 2003; 14 (1): 21-32.
- Browne GJ, Durrett JR, Wetherbe JC. Consumer ractions toward clicks and bricks: investigating buying behavior on-line and at stores. *Behav Inf Technol* 2004; 23(4): 237-45.
- Brunelle E. The moderating role of cognitive fit in consumer channel preference. *J Electron Commer* 2009; 10(3): 178-195.
- Bloemer J, de Ruyter K. On the relationship between store image, store satisfaction and store loyalty. *Euro J Mark* 1997; 32 (5/6): 499–513.
- Bustillo M, Fowler GA. Wal-Mart sees stores as online edge. *Wall Street Journal* 2009; (December 15), B1.
- Cohen J. Statistical power analysis for the behavioral sciences. Hillsdale, NJ: Erlbaum: 1988.
- Dabholkar PA, Bagozzi RP. An attitudinal model of technology-based self-service: moderating effects of consumer traits and situational factors. *J Acad Mark Sci* 2002; 30(3): 184-201.
- Dahl DW, Honea H, Manchanda RV. Three Rs of Interpersonal Consumer Guilt: Relationship, Reciprocity, Reparation. *J Consum Psychol* 2005; 15(4): 307–315.
- Darden WR, Babin BJ. Exploring the concept of affective quality: Expanding the concept of retail personality. *J Bus Res* 1994; 29(2): 101–109.

- 
- Dawson S, Bloch PH, Ridgway NM. Shopping motives, emotional states, and retail outcomes. *J Retail* 1990; 66(4): 408–427.
- Donovan RJ., Rossiter JR, Marcoolyn G, Nesdale A. Store atmosphere and purchasing behavior. *J Retail* 1994; 70 (3): 283–294.
- Eroglu SA, Machleit KA, Davis LM. (2001). Atmospheric qualities of online retailing a conceptual model and implications. *J Bus Res* 2001, 54:177-84.
- Fournier S, Dobscha S, Mick DG. Preventing the premature death of relationship marketing. *Harv Bus Review* 1998, 76(1): 42-51.
- Godfrey A, Seiders K, Voss GB. Enough Is Enough! The Fine Line in Executing Multichannel Relational Communication, *J Mark* 2011; 75(4): 94-109.
- Golden LL, Gerald A, Mary Z. The numerical comparative scale: an economical format for retail image measurement. *J Retail* 1987; 63(4): 393-410.
- Grewal D, Krishnan R, Baker J, Borin, N. The effect of store name, brand name and price discounts on consumers' evaluations and purchase intentions. *J Retail* 1998; 74 (3): 331–352.
- Hair JE, Anderson RE, Tatham RL, Black WC. *Multivariate data analysis*. (5<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice-Hall: 1998.
- Hennig-Thurau T, Groth M, Paul M, Gremler DD. Are all smiles created equal? How emotional contagion and emotional labor affect service relationships. *J Mark* 2006; 70(3): 58-73.
- Hopkins CD, Alford BL. A new sevendimensional approach to measuring the retail image construct. *Acad Mark Stud* 2001; 5(2): 105–114.



- 
- Homburg C, Muller M, Klarmann M. When does salespeople's customer orientation lead to customer loyalty? The differential effects of relational and functional customer orientation. *J Acad Mark Sci* 2011; 39: 795-812.
- Jin B, Park JY, Kim J. Joint influence of online store attributes and offline operations on performance of multichannel retailers. *Behav Inf Technol* 2010; 29(1): 85-96.
- Keen C, Wetzels M, de Ruyter K, Feinberg R. E-Tailers Versus Retailers: Which Factors Determine Consumer Preferences. *J Bus Res* 2004; 57(7):685-695.
- Konus U, Verhoef PC, Neslin SA. Multichannel shoppers segments and their covariates. *J Retail* 2008; 84(4): 398-413.
- Kwon W, Lennon S. What induce online loyalty? Online versus offline brand image. *J Bus Res* 2009; 62(5): 557-564.
- Macintosh G, Lockshin LS. Retail relationships and store loyalty: a multi-level perspective. *Int J Res Mark* 1997; 14(5): 487-497.
- Martineau P. The personality of the retail store. *Harv Bus Rev* 1958; 36(1): 47-55.
- Mathwick C, Naresh M, Edward R. Experiential value: conceptualization, measurement and application in the catalog and Internet shopping environment. *J Retail* 2002; 77(1): 39-56.
- McFarland RG, Challagalla GN, Shervani TA. Influence tactics for effective adaptive selling. *J Mark* 2006; 70: 103-117.
- Montoya-Weiss MM, Voss GB, Grewal D. Determinants of Online Channel Use and

- 
- Overall Satisfaction with a Relational, Multichannel Service Provider. *J Acad Mark Sci* 2003; 31(4):448-458.
- Overby JW, Lee E. The effects of utilitarian and hedonic online shopping value on consumer preference and intentions. *J Bus Res* 2006; 59: 1160-1166.
- Pan Y, Zinkhan GM. Determinants of retail patronage: a meta-analytical perspective. *J Retail* 2006; 82(3): 229-243.
- Paul M, Hennig-Thuran T, Gremler DD, Gwinner KP, Wiertz C. Toward a theory of repeat purchase drivers for consumer services. *J Acad Mark* 2009; 37: 215-237.
- Sawhney M. Don't homogenize, synchronize. *Harv Bus Rev* 2001; 79: 101-108.
- Sherman E, Mathur A, Smith RB. Store environment and consumer purchase behavior: Mediating role of consumer emotions. *Psychol Mark* 1997; 14 (4): 361–378.
- Steinfeld C, Mahler A, Bauer J. Electronic commerce and the local merchant: opportunities for synergy between physical and web presence. *Electron Mark* 1999; 9(2): 51-57.
- Smith RB, Sherman E. Effects of store image and mood on consumer behavior: A theoretic and empirical analysis. *Adv Consum Res* 1993; 20(1): 631.
- Rangaswamy A, van Bruggen GH. Opportunities and challenges in multichannel marketing: an introduction to the special issue. *J Interact Mark* 2005; 19(2): 5-11.
- Reinartz W, Thomas JS, Kumar V. Balancing acquisition and retention resources to maximize customer profitability. *J Mark* 2005; 69: 63–79[January].
- Rohm A J, Swaminathan V. A typology of online shoppers based on shopping

---

motivations. *J Bus Res* 2004; 57:748-57.

Rust RT, Verhoef PC. Optimizing the marketing intervention mix in intermediate-term CRM. *Mark Sci* 2005; 24(3): 477–89.

Verhagen T, van Dolen W. Online purchase intention: a multi-channel store image perspective. *Inf Manag* 2009; 46: 77-82.

Verhoef PC, Langerak F. Possible determinants of consumers' adoption of electronic grocery shopping in Netherlands. *J Retail Consum Serv* 2001; 8(5): 275-8.

Verhoef PC. Understanding the effect of customer relationship management efforts on customer retention and customer share development. *J Mark* 2003; 67: 30–45[October].

William KC, Spiro RL. Communication style in the salesperson-customer dyad. *J Mark Res* 1985; 22: 434-442.

Wikstrom S. From e-channel to channel mix and channel integration. *J Mark Manag* 2005; 21(7): 725-53.

Yang S, Lu Y, Zhao L, Gupta S. Empirical investigation of customers' channel extension behavior: perceptions shift toward the online channel. *Compute Hum Behav* 2011; 27: 1688-1696.

## Tables & Figures

Table 1

Sample Characteristics

<b>Gender (%)</b>		<b>Income (%)</b>	
Male	39.4	Under 2000	15.2
Female	60.6	2,000-4,000	32.5
<b>Age (%)</b>		4,001-6,000	22.1
18-20 years old	1.5	6,001-8,000	15.2
21-29 years old	62.1	Above 8,000	14.9
30-39 years old	29.9	<b>Online shopping frequency (%)</b>	
40-59 years old	6.6	Less than once per month	7.8
<b>Education (%)</b>		At least once per month	36.7
High school and below	3.9	At least once per week	55.5
Diploma	21.5	<b>Examples of products purchased online</b>	
Bachelor	60.9	Books	
Master and above	13.7	Clothing & Shoes	
		Groceries	
		Cosmetics	
		Electronics	

Table 2

Correlations and measurement information

	Mean	SD	Cronbach	1	2	3	4	5	6	7	8	9	10
1. Attitude	6.2	0.7	0.83										
2. Shopping frequency	2.5	0.7	-	.19**									
3. Cog1_Environment	5.5	0.8	0.76	.20**	.05								
4. Cog2_Value for money	6.1	0.8	0.76	.17**	.01	.39**							
5. Cog3_Service	5.1	0.9	0.69	.16**	.04	.50**	.33**						
6. Cog4_Merchandise	5.4	0.9	0.56	.23**	.08	.41**	.37**	.42**					
7. Affective	5.7	0.8	0.87	.21**	.01	.69**	.43**	.49**	.40**				
8. Relational	4.4	1.0	0.84	.15**	.17**	.26**	.09	.41**	.26**	.40**			
9. Interaction	3.8	1.1	0.57	.05	.03	.18**	-.12*	.20**	.11*	.17**	.40**		
10. Intention offline	5.3	1.2	0.83	.12*	.03	.32**	.21**	.25**	.33**	.29**	.16**	.02	
11. Intention online	5.7	1.0	0.83	.15**	.18**	.24**	.33**	.27**	.25**	.24**	.12*	-.06	-.06

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Table 3  
Loadings, significance and composit reliability

Construct	Composite Reliability	AVE	Measurement Item	Loading	Standard Error	t Statistics
Cog1_Environment	0.85	0.60	E1	0.69	0.10	6.78
			E2	0.86	0.05	18.89
			E3	0.84	0.06	14.77
			E4	0.68	0.10	7.12
Cog2_Value for money	0.85	0.67	V1	0.70	0.12	5.67
			V2	0.86	0.05	18.10
			V3	0.87	0.04	20.54
Cog3_Service	0.82	0.61	S1	0.78	0.08	9.75
			S2	0.80	0.10	7.99
			S3	0.76	0.12	6.42
Cog4_Merchandise	0.77	0.53	M1	0.77	0.12	6.63
			M2	0.80	0.07	11.21
			M3	0.60	0.14	4.19
Affective attribute	0.91	0.66	Aff1	0.82	0.06	13.99
			Aff2	0.85	0.04	22.57
			Aff3	0.80	0.06	13.87
			Aff4	0.81	0.06	12.97
			Aff5	0.79	0.07	11.95
Relational attribute	0.88	0.60	Relat1	0.70	0.18	3.97
			Relat2	0.80	0.19	4.21
			Relat3	0.83	0.15	5.55
			Relat4	0.85	0.17	5.08
			Relat5	0.69	0.22	3.18
Interaction orientation	0.81	0.69	Inter2	0.91	0.27	3.37
			Inter3	0.74	0.31	2.39
Attitude toward shopping online	0.90	0.74	Att1	0.90	0.11	8.22
			Att2	0.87	0.14	6.25
			Att3	0.81	0.17	4.76
Intention Offline	0.92	0.86	Offline1	0.93	0.02	52.61
			Offline2	0.92	0.03	34.80
Intention Online	0.92	0.85	Online1	0.92	0.03	33.18
			Online2	0.93	0.02	41.28

Table 4

Results of hierarchical regression analyses for moderation of the relationship between offline channel attributes and online consumers' intention to shop offline by consumer interaction orientation<sup>a</sup>

<i>Dependent variable : Intention to shop offline</i>				
Independent Variables	Model 1	Model 2	Model 3	Model 4
<b>Control variables</b>				
Attitude	0.20*	0.03	0.04	0.03
General frequency	0.01	-0.01	0.01	-0.01
<b>Attributes</b>				
Cognitive1(environment)		0.23*	0.2	0.18
Cognitive2 (value)		0.04	0.10	0.10
Cognitive3 (service)		0.06	0.04	0.04
Cognitive4 (product)		0.28***	0.28***	.28***
Affective		0.08	0.09	0.09
Relational		0.02	-0.05	-0.03
<b>Moderator</b>				
Interaction orientation			.18**	.17**
<b>Interactions</b>				
Affective x Interaction				0.08
Relational x Interaction				-0.01
R2	0.02	.16***	.18***	0.18
$\Delta R^2$		0.14***	.02**	0.01

<sup>a</sup> Unstandardized coefficients are reported

\*\*\* $P < .001$ , \*\* $P < .01$ , \* $P < .05$

Table 5

Results of hierarchical regression analyses for moderation of the relationship between offline channel attributes and online consumers' intention to shop online by consumer interaction orientation<sup>a</sup>

*Dependent variable : Intention to shop online*

Independent Variables	Model 1	Model 2	Model 3	Model 4
<b>Control variables</b>				
Attitude	.18*	0.06	0.06	0.06
General frequency	.22**	.22**	.22***	.19**
<b>Attributes</b>				
Cognitive1		0.04	0.04	0.03
Cognitive2		0.29***	.29***	0.28***
Cognitive3		0.14*	.14*	0.13
Cognitive4		0.08	0.09	0.09
Affective		0.05	0.04	0.05
Relational		-0.03	-0.02	0.01
<b>Moderator</b>				
Interaction orientation			-0.02	-0.04
<b>Interactions</b>				
Affective x Interaction				0.08
Relational x Interaction				.11**
R2	0.05	0.17***	0.17	0.20***
ΔR2		0.13***	0.00	0.03**

<sup>a</sup> Unstandardized coefficients are reported

\*\*\* $P < .001$ , \*\* $P < .01$ , \* $P < .05$

Figure 1

Hypothesized relationships

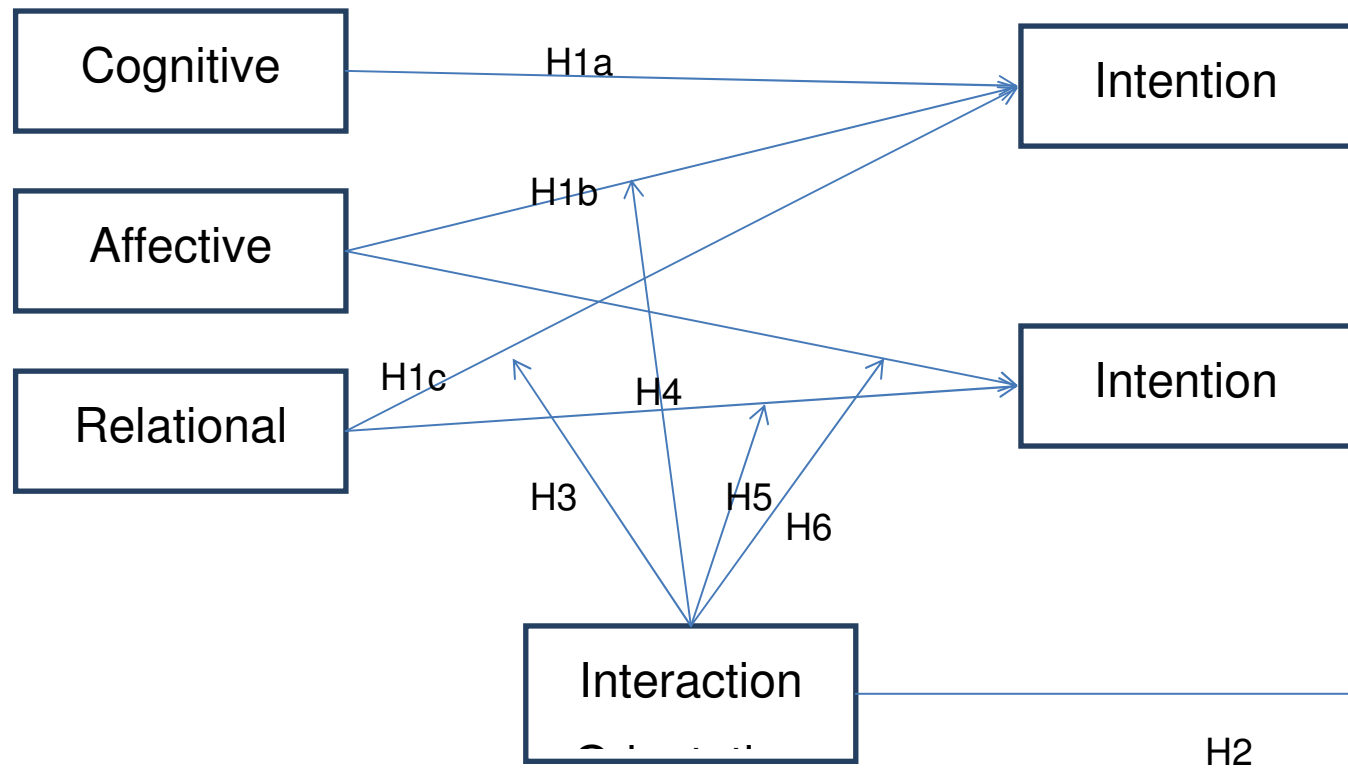


Figure 2.

Effect of the interaction between consumers' interaction orientation and offline relational attributes on consumers' intention to shop online



